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Title	A new Species of Genus Aphidius Nees and Redescription of Aphidius japonicus Ashmead (Taxonomic Notes on Aphidiidae of Japan,1)
Author(s)	WATANABE, Chihisa
Citation	INSECTA MATSUMURANA, 13(2-3): 81-84
Issue Date	1939-03
Doc URL	http://hdl.handle.net/2115/9410
Right	
Type	bulletin
Additional Information	



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A NEW SPECIES OF GENUS *APHIDIUS* NEES
AND REDESCRIPTION OF
APHIDIUS JAPONICUS ASHMEAD
(TAXONOMIC NOTES ON *APHIDIIDAE* OF JAPAN, I)

By

CHIHISA WATANABE

(渡邊千尙)

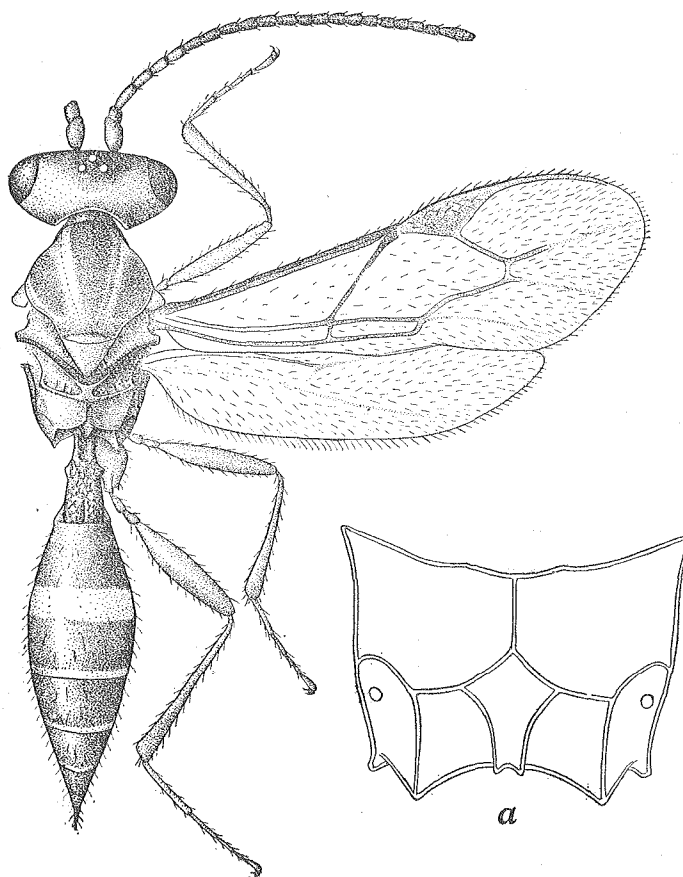
(With one Textfigure)

Aphidius salignae sp. nov.

♀. Rufo-testaceous; mesonotum, propodeum and 1st tergite more or less fuscous; 2nd tergite dark brown with a broad yellow band at the apex; 3rd and following tergites dark brown to black; 3rd to 5th tergites at the apex yellowish; antennae black, except the 1st joint testaceous and the following several joints somewhat yellowish at the base. Wings hyaline; stigma and veins light brown; tegulae testaceous. Legs entirely rufo-testaceous, only the claws black.

Head transverse, smooth and shining; eyes coarsely pubescent; clypeus truncate at the anterior margin; antennae rather longer than the head and thorax united, 21-jointed. Thorax smooth and shining; parapsidal furrows smooth, obsolete on the posterior third. Propodeum completely areolated, declivous at the middle, faintly rugulose; posterior face broadly excavated medially; petiolar area pentagonal, a little longer than broad; median longitudinal basal carina a little longer than the distance from its bifurcation to a point in line with emission of the costulae. Stigma subtriangular, shorter than the metacarpus; 1st abscissa of the radius a little longer than the stub of the 2nd, which is 2 times as long as the intercubitus; nervulus very short, interstitial; 1st brachial cell closed; nervus parallelus interstitial with the medial nervure. Abdomen lanceolate, longer than the head and thorax together; 1st tergite subpetiolate, 3 times as long as broad, slightly dilated from the tubercles, which are situated at the basal two-fifths, to the apex, finely rugulose, with an incomplete median longitudinal furrow at the apex; 2nd and following tergites smooth and shining; ovipositor slightly exerted, the sheath compressed, stout, slightly curved upwards at the apex.

Length, 3.5-4 mm.



Aphidius salignae sp. nov. (♀)

a. Propodeum

♂. Differs from the female, apart from the usual sexual differences, in the following points:—

(1) Darker than the female in colour. (2) Antennae a little shorter than the body, 25-jointed. (3) Propodeum more strongly rugulose than that of the female, with the petiolar area comparatively larger. (4) Abdomen as long as the head and thorax united, oblong, stouter than that of the female.

Length, 3.5–4 mm.

Host—*Tuberolachnus saligna* GMELIN

This species is parasitic on *Tuberolachnus saligna* GMELIN, a large Aphid commonly found on different species of *Salicaceae*; the present writer collected

a twig of willow covered with empty skins of the Aphids, from which there appeared four females and three males of this parasite and a number of a Chalcid secondary parasite. Dr. H. Kôno also found a male of this parasite from the same host.

Holotype (♀) and **Allotype** (♂): Sapporo, 23. VII, 1938, C. WATANABE leg. **Paratypes**: 1 ♂, Sapporo, 27. VII, 1937, H. Kôno leg.; 3 ♀♀, 2 ♂♂, Sapporo, 23. VII, 1938, C. WATANABE leg. All the types are deposited in the Entomological Institute of the Hokkaido Imperial University, Sapporo.

Habitat—Hokkaido (Sapporo).

Remarks: This species may be placed near *Aphidius gregarius* MARSHALL*, a parasite of *Melanoxanthus salicis* LINNÉ which also infests willows and poplars, but judging from MARSHALL's descriptions** it is distinguished from the latter by the colour of the abdomen and by the structure of the 1st tergite.

***Aphidius japonicus* ASHMEAD**

Aphidius japonicus ASHMEAD, Proc. U. S. Nat. Mus., XXX, p. 189, ♀♂ (1906).

Coelonotus japonicus FAHRINGER, Festschrift 60. Geburtst. Prof. Dr. E. STRAND, III, pp. 242 & 244, ♀♂ (1937).

As a supplement to the original description the following aspects may be added:—

♀. Head dark brown; face brownish; mandibles, the tips excepted, and palpi pale yellow; thorax and legs rufo-testaceous; suture of the scutellum and tarsi fuscous; wings hyaline; stigma and veins light brown; tegulae testaceous; propodeum and abdomen dark brown; 2nd tergite with a broad transverse yellow band at the apex.

Head transverse, smooth and shining; eyes coarsely pubescent; clypeus small, truncate at the anterior margin; antennae as long as the head and thorax united, 22-jointed. Thorax smooth and shining; parapsidal furrows smooth, obsolete on the posterior half. Propodeum incompletely areolated, declivous at the basal third; anterior face almost smooth, divided into two areas surrounded by a carina; posterior face rugulose, broadly excavated medially. Stigma sub-triangular, shorter than the metacarpus; 1st abscissa of the radius about 1.3 times the length of the stub of the 2nd, which is a little more than 2 times the length of the intercubitus; nervulus very short, slightly postfurcal; 1st brachial cell closed; nervus parallelus interstitial with the medial nervure. Abdomen longer than the head and thorax united, lanceolate; 1st tergite strongly reticulate-

* Ent. M. Mag., IX, p. 123, ♀♂ (1872).

** Spec. Hymén. Europe, V. p. 570, ♀♂, Pl. XIX, fig. 1, ♀ (1896) & Trans. Ent. Soc. London, p. 42, ♀♂, Pl. I, fig. 8, ♀ (1899).

rugulose, subpetiolate, 3 times as long as broad, slightly dilated from the tubercles, which are situated at the basal two-fifths, to the apex; 2nd and following tergites smooth and shining; ovipositor subexserted, the sheath compressed, stout, obtuse.

Length, 4.5 mm.

♂. No representatives of the male have been seen by the present writer, but according to ASHMEAD, it "Agrees well with the female, except that the mesothoracic lobes are sometimes dusky, the antennae longer, 24-jointed, while the abdomen beneath, the basal half of the third dorsal segment, and sometimes the sutures 4 and 5 are yellow. Length 4 mm."

Host—*Pterochlorus tropicalis* VAN DE GOOT

This series is labelled as a parasite of *Pterochlorus tropicalis* VAN DE GOOT, a large Aphid infesting the chestnut tree, *Castanea crenata*. Further, this species was originally described as a parasite of an undetermined Aphid. *Pterochlorus tropicalis* is the first specific host record.

Habitat—Honshu (Gifu, after ASHMEAD; Kyoto, 5 ♀♀, 5. V, 1929, K. TAKEUCHI leg.).

General Distribution: Japan.

Remarks: On account of the excavated propodeum, this species was transferred to *Coelonotus* FÖRSTER by FAHRINGER. The writer is, however, much inclined to the opinion that *Coelonotus* FÖRSTER*, which is a doubtful genus without any valid species in the original description, should be a synonym of *Aphidius* NEES.**

Here the writer desires to express his sincere gratitude to Dr. H. KÔNO of the Entomological Institute, Hokkaido Imperial University, Sapporo and to Mr. K. TAKEUCHI of the Takeuchi Entomological Laboratory, Kyoto for presenting the material.

摘 要

本邦産アブラバチ科の分類學的研究の第Ⅰ報として次の2種のアブラバチを報告する。

Aphidius salignae WATANABE (sp. nov.) ヤナギオホアブラバチ (新稱)

寄主 *Tuberolachnus salignae* GMELIN ヤナギオホアブラ

Aphidius japonicus ASHMEAD マダラアブラバチ (改稱) (マダラアリマキヤドリ***)

寄主 *Pterochlorus tropicalis* VAN DE GOOT クリオホアブラ

因にアブラバチ科 (*Aphidiidae*) をⅠ亜科としてコマニバチ科 (*Braconidae*) に隸屬する學者もあるが、最近は獨立のⅠ科として取扱ふ學者が多い。

* Verh. Naturh. Ver. Preuss. Rheinl., XIX, p. 248 (1862).

** Nov. Acta Acad. Nat. Curios, IX, p. 302 (1818).

*** 松村松年: 日本益蟲目録, p. 95 (1908).